

ABSTRACT OF THE DISCLOSURE

In a process for forming a silicon-type thin film by high-frequency plasma chemical vapor deposition, silicon fluoride and hydrogen are contained in a material gas and oxygen atoms are incorporated in the material gas in a concentration of from 0.1 ppm to 0.5 ppm based on that of silicon atoms. By this process, photovoltaic devices having a good photoelectric conversion efficiency and superior adherence and environmental resistance can be formed at a cost made greatly lower than ever.